

## Title (en)

STEEL PRODUCT COMPOSITE AND PROCESS FOR PRODUCING THE STEEL PRODUCT COMPOSITE

## Title (de)

STAHLPRODUKTVERBUNDSTOFF UND VERFAHREN ZUR HERSTELLUNG DES STAHLPRODUKTVERBUNDSTOFFES

## Title (fr)

COMPOSÉ DE PRODUIT D'ACIER ET PROCÉDÉ DE PRODUCTION DU COMPOSÉ DE PRODUIT D'ACIER

## Publication

**EP 2153985 A4 20100714 (EN)**

## Application

**EP 08764799 A 20080528**

## Priority

- JP 2008059783 W 20080528
- JP 2007140072 A 20070528

## Abstract (en)

[origin: EP2153985A1] The present invention provides an excellent structural material for movable equipment, structural members for building materials, electronic and electrical equipment and the like by bonding an ordinary steel material and an FRP prepreg strongly to each other to facilitate mechanical joining and disassembly using bolts and nuts or the like. It has been found that a steel material having surface configuration with specifically determined ultra-fine irregularities is compatible with an epoxy resin adhesive and exhibits thus strong adhesion. This technique can be utilized to produce a composite component 26 that comprises steel plates 28, as a cover material, integrated with FRP 27. The composite component can be assembled with other metallic members through fastening using bolts 30. Also, structural members having the FRP 27 in the main structure and the steel material at the ends can be easily produced by virtue of the above strong adhesion.

## IPC 8 full level

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## Citation (search report)

- [E] EP 2103407 A1 20090923 - TAISEI PLAS CO LTD [JP]
- [XY] WO 2005110736 A2 20051124 - BOEING CO [US], et al
- [E] EP 2082859 A1 20090729 - TAISEI PLAS CO LTD [JP]
- [E] EP 2127865 A1 20091202 - TAISEI PLAS CO LTD [JP]
- [XY] DATABASE WPI Week 200121, Derwent World Patents Index; AN 2001-205682, XP002580858
- See references of WO 2008146833A1

## Citation (examination)

EP 1559542 A1 20050803 - TAISEI PLAS CO LTD [JP]

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